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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/008,430	11/13/2001	Matthew F. Ogle	1416.10US01	3022

24113 7590 10/03/2003

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EXAMINER	
LANKFORD JR, LEON B	

ART UNIT	PAPER NUMBER
1651	

DATE MAILED: 10/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/008,430	OGLE ET AL.	
	Examiner	Art Unit	
	L Blaine Lankford	1651	

-- The MAILING DATE of this communication appears on the cover sheet with th correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-35 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-35 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 13 November 2001 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 31-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Caryle et al(99/37337).

Carlyle teaches a substrate, e.g. a prothesis, on which is coated VEGF or related factors. The factors are attached via chemical bonding, crosslinking or an adhesive. The reference anticipates the claim subject matter.

Claims 31-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Keogh (6033719).

Keogh teaches a device on which is coated a biomolecule factor through covalent bonds. The reference anticipates the claim subject matter.

Claims 31-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Keogh (6033719).

Keogh teaches a device on which is coated a biomolecule factor through covalent bonds. The reference anticipates the claim subject matter.

Claims 1-2, 7, 23-24, 26, 28, 31-33 & 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Martin et al(WO 98/20027).

Martin teaches a device onto or into which a VGEF agonsit is attached (see eg the claims). The reference anticipates the claims.

Claims 31-33 are rejected under 35 U.S.C. 102(a) as being anticipated by Slaikeu et al(WO 01/03607).

Slaikeu teaches a medical device on which is coated or associated an angiogenic factor. The reference anticipates the claim subject matter.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not

commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlyle et al(99/37337) in view of Martin et al(WO 98/20027).

Carlyle teaches a needed medical device on to which VEGF has been attached to to promote population of the device with viable cells and other positive results. Carlyle teaches all of the claimed devices in detail through the reference and also details means for attaching the peptide to the device in all the methods applicant claims. The reference teaches all of the claimed limitations except that the reference uses VEGF and does not teach using a VEGF stimulation compound however at the time the invention was made it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute a VEGF stimulation compound for the VEGF used by Carlyle because Martin teaches that using such compounds produces like results to using the peptide itself. The references clearly provide a reasonable expectation of success that using a known stimulator/agonist of VEGF on a medical device would produce the same desired results as sought by Carlyle.

As the references clearly indicate that the various proportions and amounts of the ingredients used in the claimed device are result effective variables, they would be routinely optimized by one of ordinary skill in the art in practicing the invention disclosed by those references.

Claims 3-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlyle et al(99/37337) in view of Martin et al(WO 98/20027) and further in view of Semenza et al(6124131) or Tsuzuki et al(Cancer Research. 60. 2000).

The teachings of Carlyle and Martin are set forth above.

Neither Carlyle nor Martin specifically teaches using HIF-1α as the stimulator/agonist of VEGF, however it would have been obvious at the time the invention was made to use HIF-1α as the agonist as taught by Martin in the process of Carlyle because Semenza and Tsuzuki teach that HIF-1α is a known agonist of VEGF. There was a reasonable expectation that substituting HIF-1α for the VEGF in the invention of Carlyle would produce like results.

Accordingly, the claimed invention was prima facie obvious to one of ordinary skill in the art at the time the invention was made especially in the absence of evidence to the contrary.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to L Blaine Lankford whose telephone number is 308-2455. The examiner can normally be reached on Mon-Thu 7:30-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Wityshyn can be reached on 308-4743. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0196.

L Blaine Lankford
Primary Examiner
Art Unit 1651